



**DATASHEET**

**UHF Avionic Amplifier**

**P/N**  
**560-00901-000**



The UHF ICU equipment is an “UHF Integrated Cositing Unit” designed with the aim to improve the technical characteristics of UHF systems.

- This unit provides signal amplification over the 225 ÷ 400MHz range.
- Its Output Power is 50W with an input signal of 2 W.
- This amplifier is equipped with a tunable fast filter module in the 225 ÷ 400MHz range that uses PiN-Diode array technology; this allows high RF performance with a 10bit interface that provides high tuning precision.
- The Filter module supports medium power RF signals, and provides fast switching speed and reduced dimensions, thus beating the technical limitations typical of other technologies (Manual Tunable Filters or Filter Banks).

**Technical SPECIFICATIONS**

**Environmental SPECIFICATIONS**

Operative Mode : Half Duplex Operating Mode	Temperature : <ul style="list-style-type: none"> <li>• Operating min -20°C max + 55°C</li> <li>• Operating at 30' min -40°C max +70°C</li> <li>• Storage min -40°C max +75°C</li> </ul>
Operative Frequency : 225 ÷ 400 MHz	Altitude : Operating and not operating up to 15.000[ft]
Bypass : <ul style="list-style-type: none"> <li>• Manual 30 ÷ 400 MHz</li> <li>• Automatic 225 ÷ 400 MHz</li> </ul>	Humidity : 95% @ 50°C Non condensed (Sect. 6, Cat. A – RTCA/DO-160F)
Tuning Time : < 40 µs	Vibration : Vibration : 0.7 grms 5 to 50Hz (Sect. 8, Cat. B – RTCA/DO-160F)
Receiver Gain : 10.0 dB	Shock : 20 g 11ms (Sect. 7, Cat. B – RTCA/DO-160F)
Receiver Noise Figure : < 9.0 dB	Acceleration : MIL-STD-810G method 513.6 procedures I and II
Max IP3 RX signal : 52 dBm @ 5 & 10% offset	
Minimum selectivity : <ul style="list-style-type: none"> <li>• -35 dB @ &gt; ± 3.0%</li> <li>• -55 dB @ &gt; ± 5.0%</li> </ul>	
Spurious in reception : < -90 dBm (> 3%)	
Broadband Noise : -140 dBm/Hz @ > 5%	
RF Input Power for Transmission : 2 W (-0/+1 W)	
RF Output Power in Transmission : <ul style="list-style-type: none"> <li>• UHF 50 W (FM) ± 1 dB</li> <li>• UHF 25 W (AM) ± 1 dB , 100 W PEP</li> <li>• Noise in transmission &lt; -80 dBc</li> <li>• Minimum level of harmonic -70 dBc (2°)</li> </ul>	

	and -80 dBc (superior)	
Logic Interface	: <ul style="list-style-type: none"> <li>• Proprietary Protocol</li> <li>• Manchester Code with 1 Mbit/s data rate</li> <li>• Logic discrete signal (Open/GND) for control and status</li> </ul>	
Ventilation	: Internal air flow system to operate with external temperature of +55°C without performance loss	
Voltage supply	: +28VDC according to MIL-STD-704C	
Dimensions	: 152 x 178 x 360 mm	
Weight	: < 7.5 Kg	